

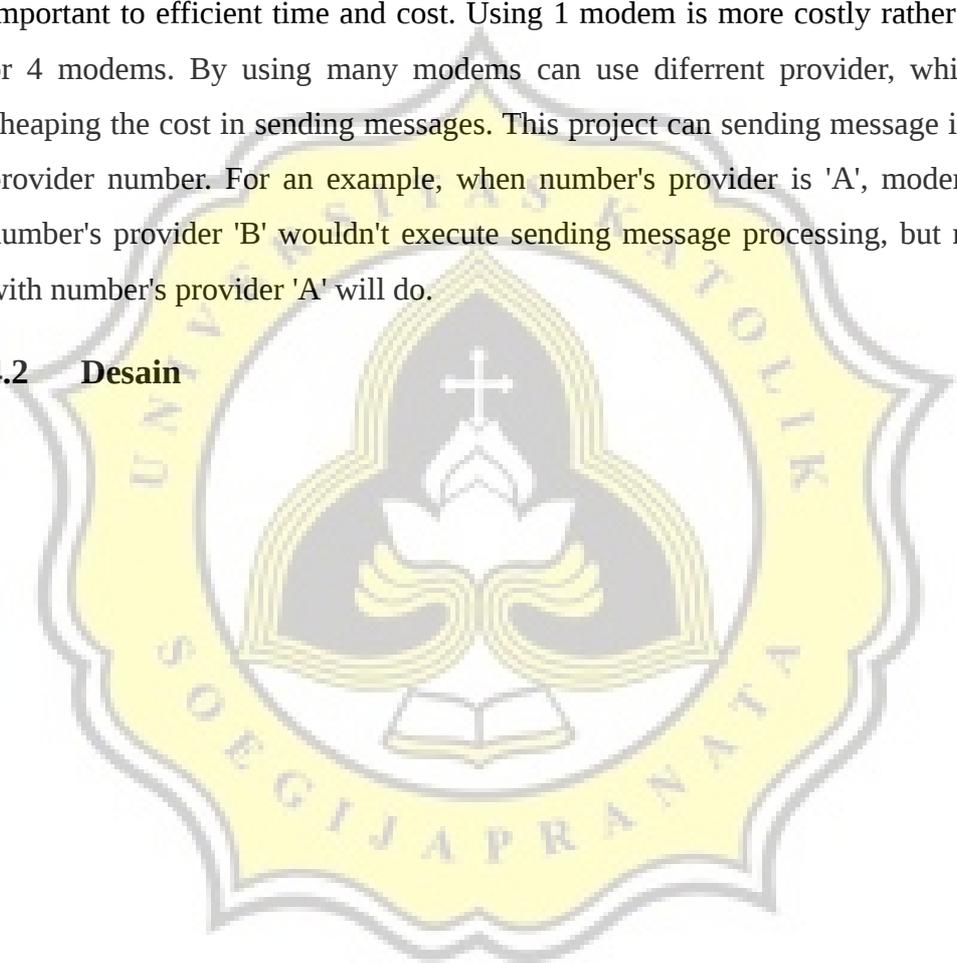
## **CHAPTER 4**

### **ANALYSIS AND DESIGN**

#### **4.1 Analysis**

According on Chapter 2, were seen that multimodem's role is very important to efficient time and cost. Using 1 modem is more costly rather than 3 or 4 modems. By using many modems can use diferrent provider, which can cheaping the cost in sending messages. This project can sending message in same provider number. For an example, when number's provider is 'A', modem with number's provider 'B' wouldn't execute sending message processing, but modem with number's provider 'A' will do.

#### **4.2 Desain**



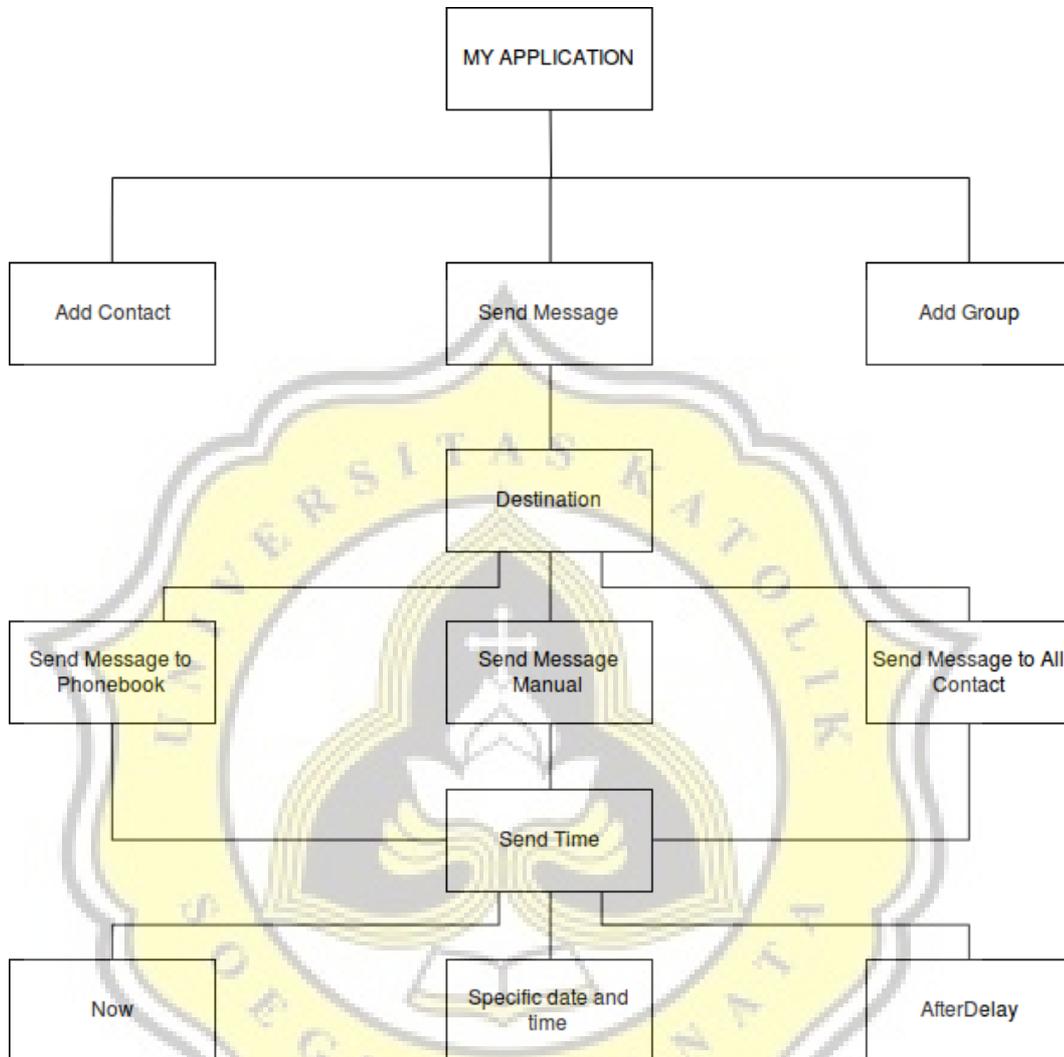


Illustration 4.1: Diagram Menu

According on diagram above, this project menu contain Add Contact, Add Group, and Send message. When select send message, there are several destination that should choose. This project could send into phonebook, which is can be inputed as contact or group. This project also could sending message into manually inserted number, and could send into all contact have been save on database. This project also support sending time method, which can send message immediately, in specific date and time, and also could insert delay on sending process.

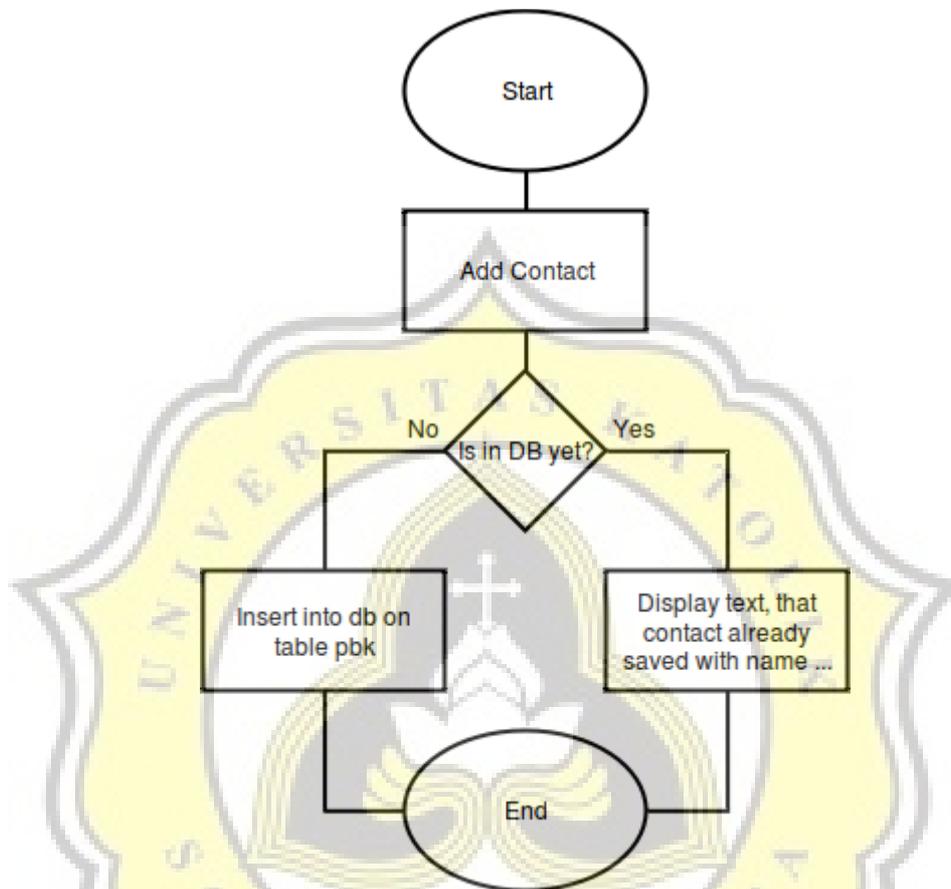


Illustration 4.2: Diagram process of adding contact

This image above is process of adding contact. There are form when clicking on add contact menu. Form must be inserted, then confirm it. There are two condition, when contact is about to insert. First condition when number is already on database. In this condition, the program would display text such as “Contact is already saved with named Charles” as example. The second condition, when no number found on database. In this condition, the program would insert the data have been inserted on form into database.

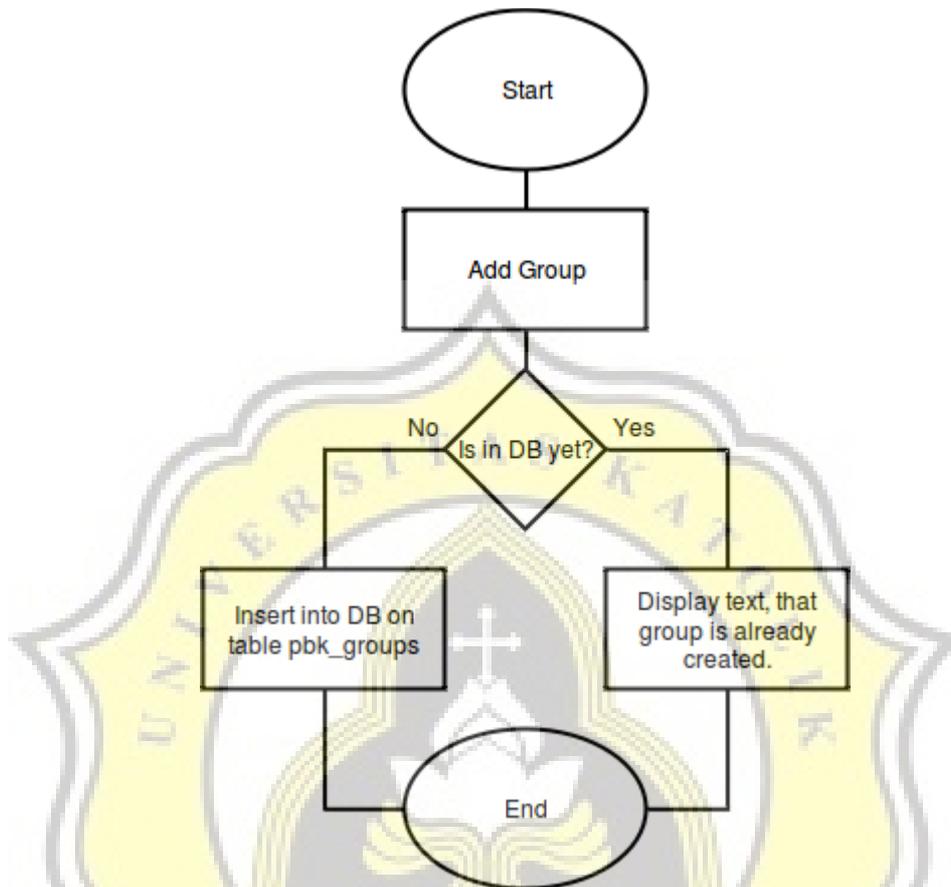


Illustration 4.3: Diagram process of add group

This image above is process of adding group. There are form when clicking on add group menu. Form must be inserted, then confirm it. There are two condition, when group is about to insert. First condition when name of group is already on database. In this condition, the program would display text such as “Group have been created” as example. The second condition, when no group found on database. In this condition, the program would insert the data have been inserted on form into database.

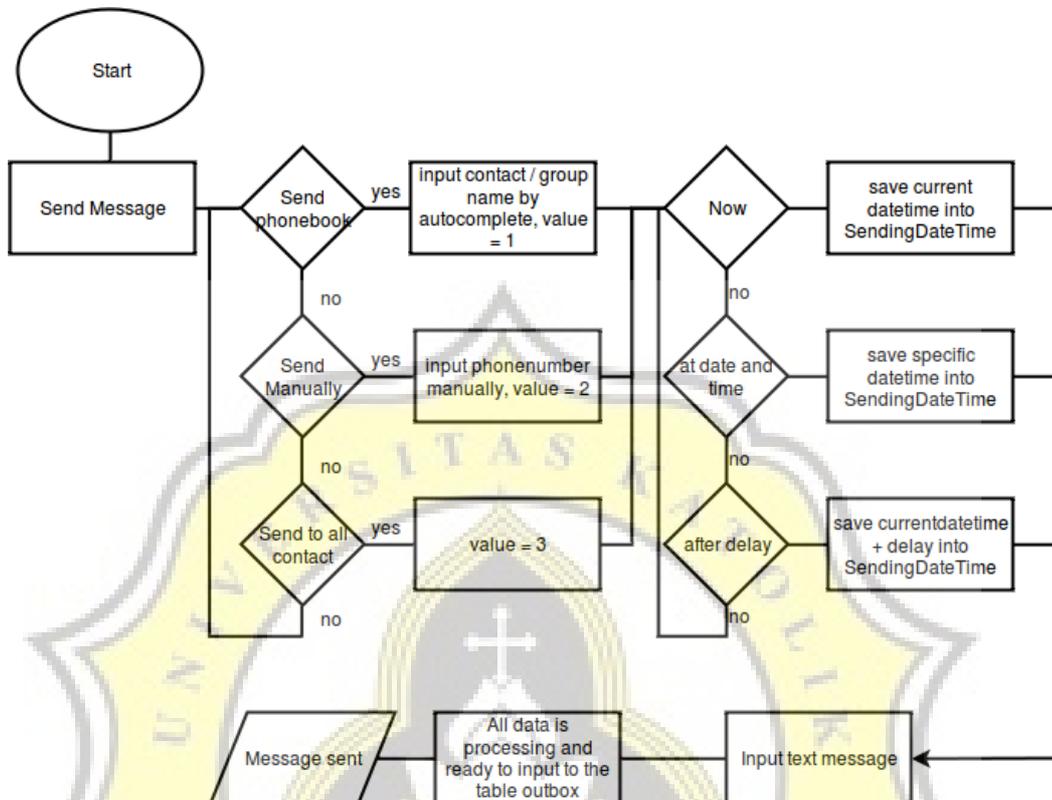


Illustration 4.4: Diagram send message processing

In order to send a message, there are 3 steps as explain above on diagram. First step is determine destination recipient of message, this project has 3 option to specify recipient number, there are send to phonebook, send manually, and send to all contact. In send to phonebook option, this project will send the message to contact or grop that saved in phonebook. In send manuallu option, the user can input the number that will receive the messages with manually, and in the send to all contact option, this project will send message to all contact that already saved. If the user choose send to phonebook option then user can input contact or group name by autocomplete and the value will set into 1. If the user choose send manually then this project will send the message into number that user input before and the value will set into 2. And if the user choose send to all contact then this project will send the message to all contact that saved in phone book and the value will set into 3.

The second thing is determine when message would be execute. This project have 3 option to determine the sending time there are now, at date and time and after delay. If user choose the now option then this project will save current date and time into sending date and time. If user choose the at date and time option then this project will save the specific date and time that user set before into sending date time. But if user choose the after delay option then this project will save the current date and time add pluss hour and minute of delay that user set before into sending date and time.

After the first and second step are done, user will write down the message on the column, then all data would be inputed into outbox table, and ready to execute.

